



Colorado Springs Charter Academy

**K-8 HVAC, Electrical, Fire Systems Replacement
Storm Drainage & MS Replacement
Security Upgrades**

Photo 1 Existing Site Plan for Colorado Springs Charter Academy 17-Acre Campus



CSCA site is part of Palmer Park and slopes 146 feet from summit to Middle School.



Site Slope continues to slope 55 feet from Middle School to Gym.

Photo 2 Entry Elevations for Colorado Springs Charter Academy: Elementary School, Middle School, Gym



Gym – Northeast Elevation, Main Entry



Elementary School – South Elevation, Main Entry



Middle School – West Elevation, Main Entry



Middle School – South Elevation

Photo 3 Deficiency #1: Failing HVAC Equipment Requires Replacement Due to Age (60 years)



Window fans supplement inadequate ventilation.



1966 vintage controls are failing and cannot be serviced.



1966 Boilers have been repaired extensively and have far exceeded their useful life.

1966 Unit Ventilators serving classrooms are inadequate for current ventilation requirements and have far exceeded their useful life.

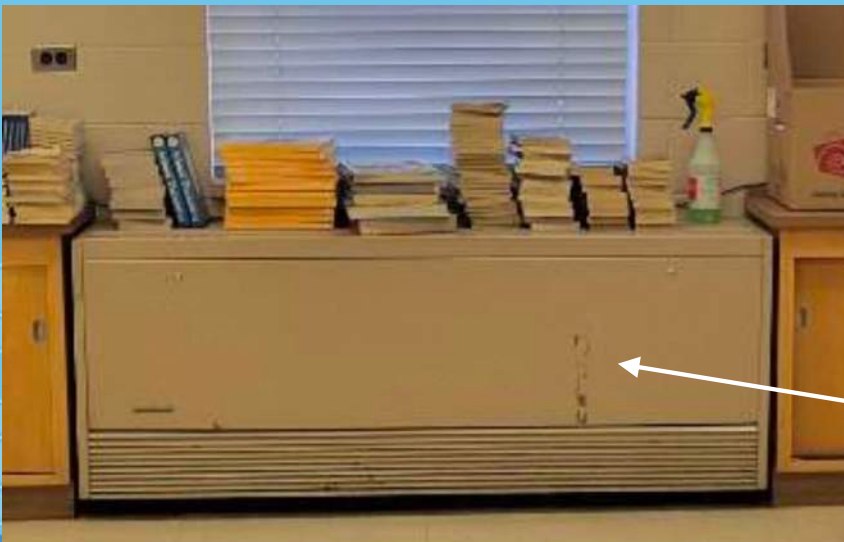


Photo 4 Deficiency #2: Failing Electrical Equipment Requires Replacement Due to Age (60 years)

Corrosion and Water Intrusion at Main Gear Creates Emergency Condition



Thermal imaging (red) shows imminent breaker and buss failure at all locations

Electrical Service is 60 years old and has far exceeded its useful life



Water actively dripping inside main gear and 1" standing water pooling at bottom of panel has corroded internal components.

Emergency Repair is scheduled for Summer 2025

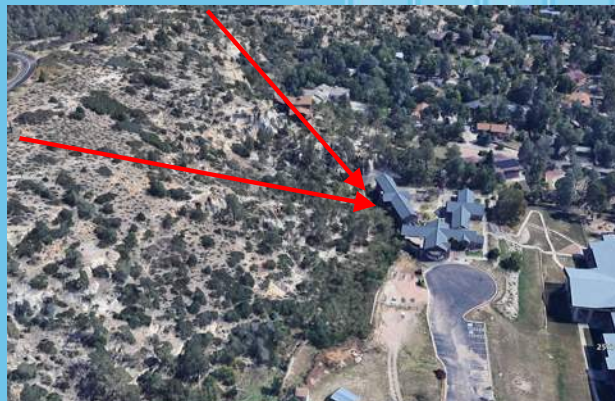


Water intrusion at Main Electrical Gear creates an **extremely dangerous** condition and has corroded Main Gear

Photo 5 Deficiency #3: Uncontrolled Storm Water Erodes Site, Threatens Landslide and Damages Middle School
Solution #3: Storm Drainage Solution Requires Middle School Replacement



Sandbags fail to protect Middle School from reoccurring flooding.



Steep rocky "V" slope conveys storm water directly to Middle School; Landslide risk



Narrow space between MS and steep rocky incline (6-10 feet) is inadequate to install Drainage Solution.

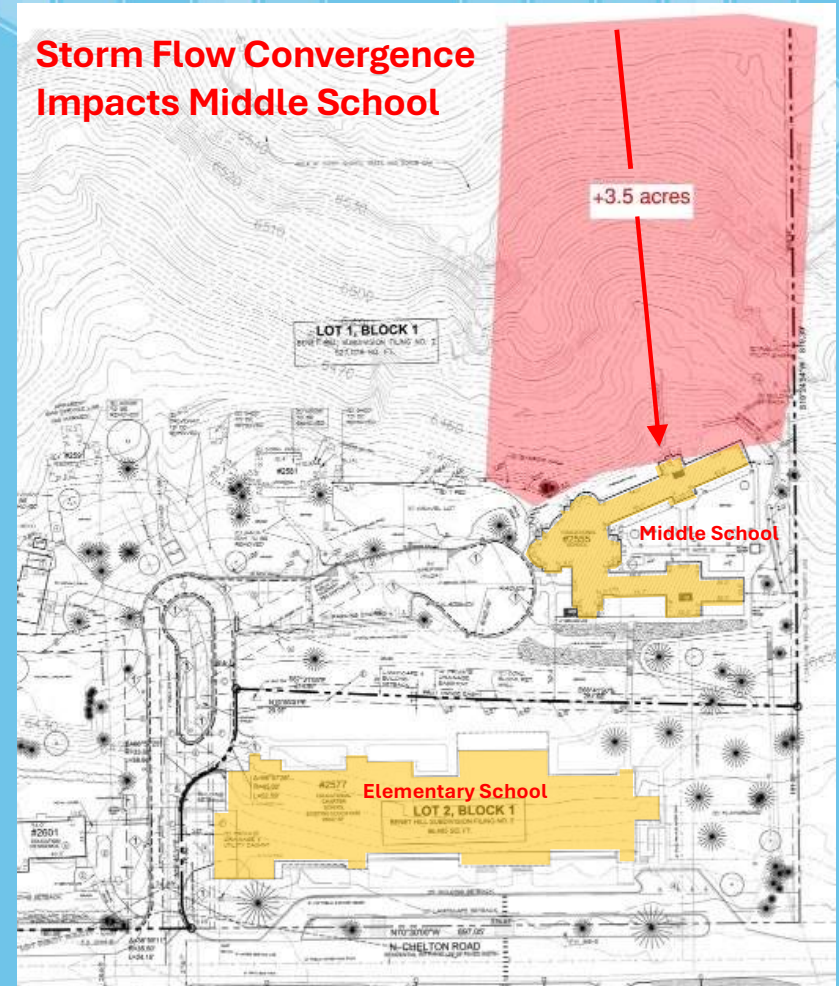


Photo 6 Deficiency #3: Uncontrolled Storm Water Erodes Site, Threatens Landslide and Damages Middle School
Solution #3: Storm Drainage Solution Requires Middle School Replacement



Torrential Storm Flows directly impact Middle School causing flooding and structural distress



6-inch Area Drain is inadequate to convey flows from +3.5 acres above; Images from 2023 storm video – link in grant text

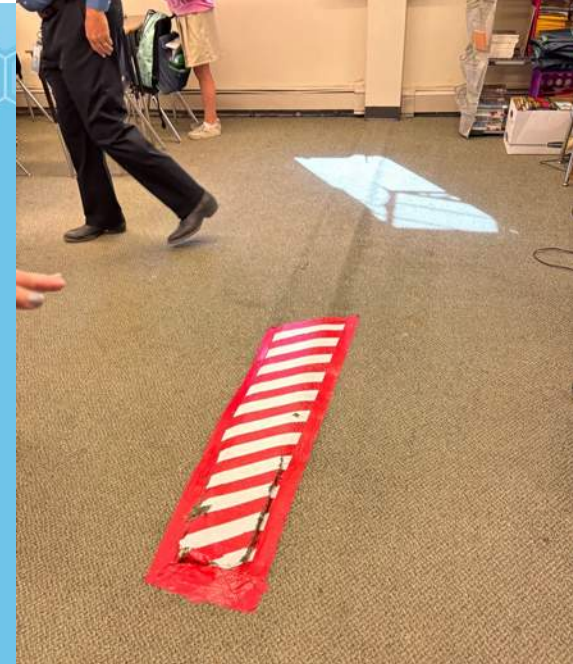
Photo 7 Deficiency #3: Uncontrolled Storm Water Erodes Site, Threatens Landslide and Damages Middle School
Solution #3: Storm Drainage Solution Requires Middle School Replacement



2" wide x 6" deep floor crack in Science Room filled with grout continues to grow in 2025



Crack in Middle School hallway continues to fracture slab and increase in size and depth



Grade beam protrudes 1" above settled slab, tripping hazard, ADA violation



Photo 8 Deficiency #3: Uncontrolled Storm Water Erodes Site, Threatens Landslide and Damages Middle School
Solution #3: Storm Drainage Solution Requires Middle School Replacement



Wall cracks throughout MS



Floor slab settlement over 2 inches



Flood at Middle School 2023



Windows crack due to foundation movement



Exterior stair heave



Floor slab distress at Middle School

Photo 9 Deficiency #3: Existing Middle School Educational Adequacy
Hallways Not Contiguous – Disruption Undermines Learning

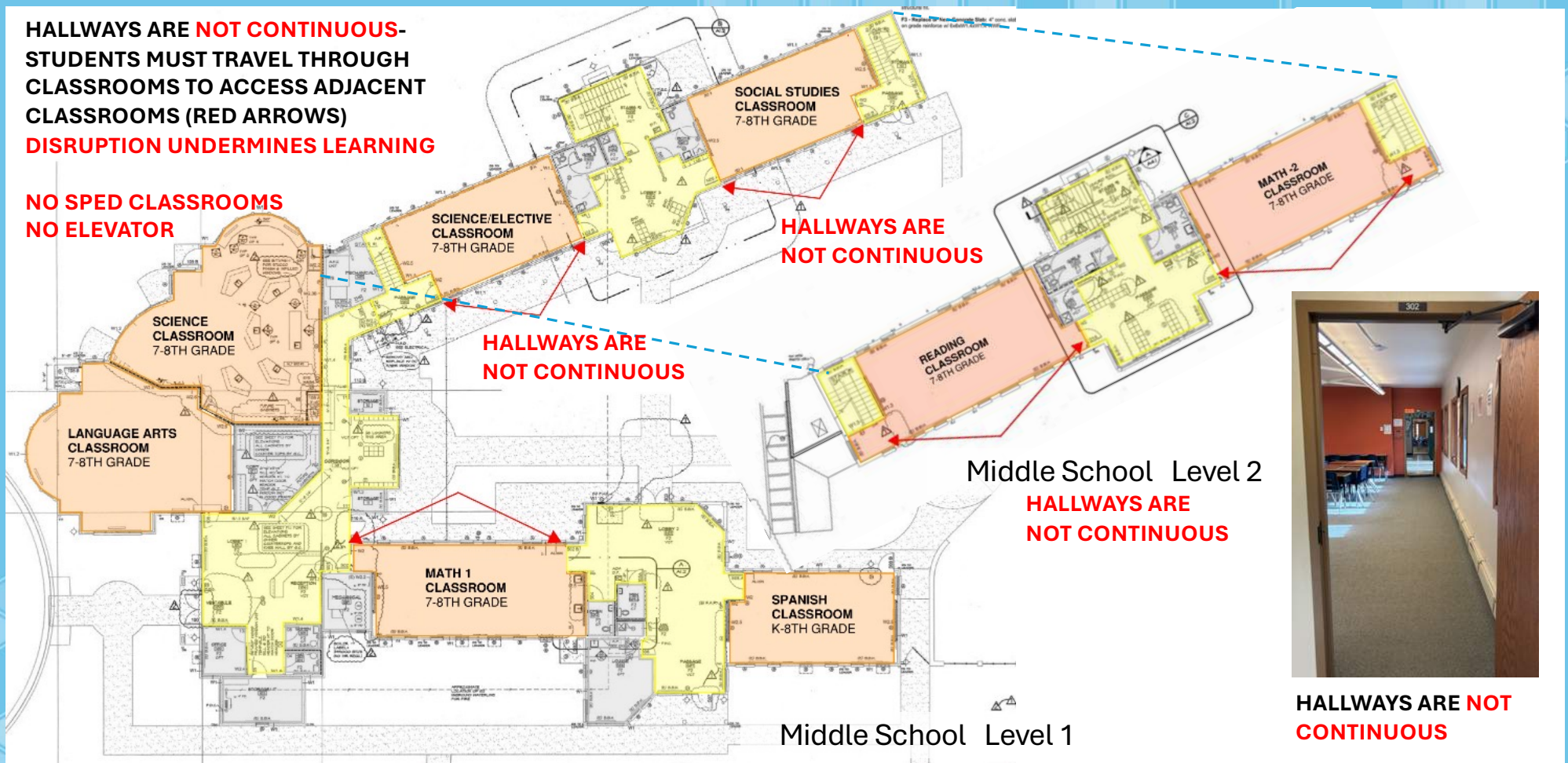


Photo 10 Solution #3 – Improve Site Storm Drainage at Existing Middle School

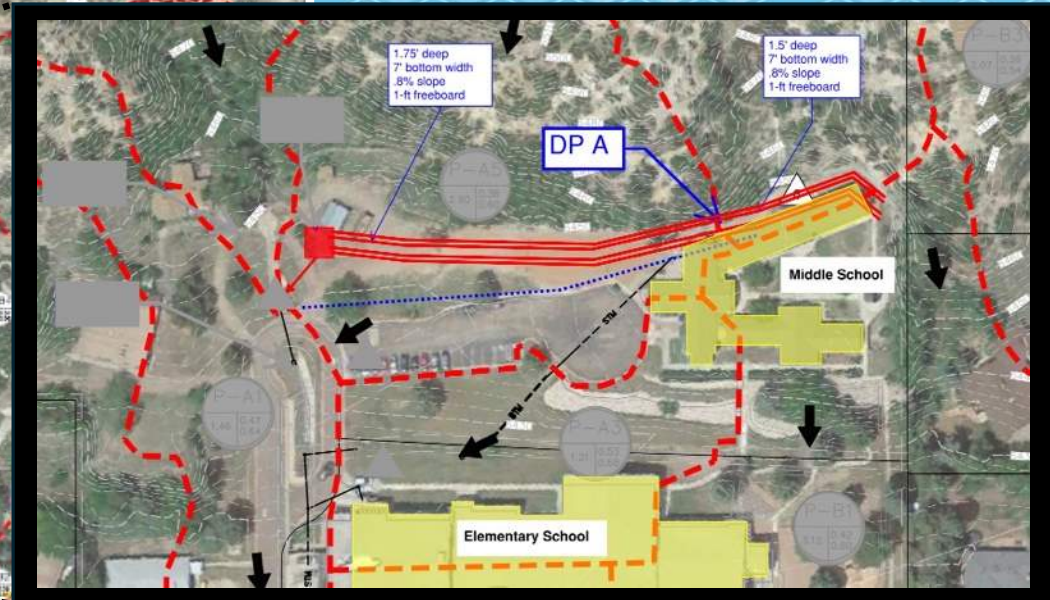
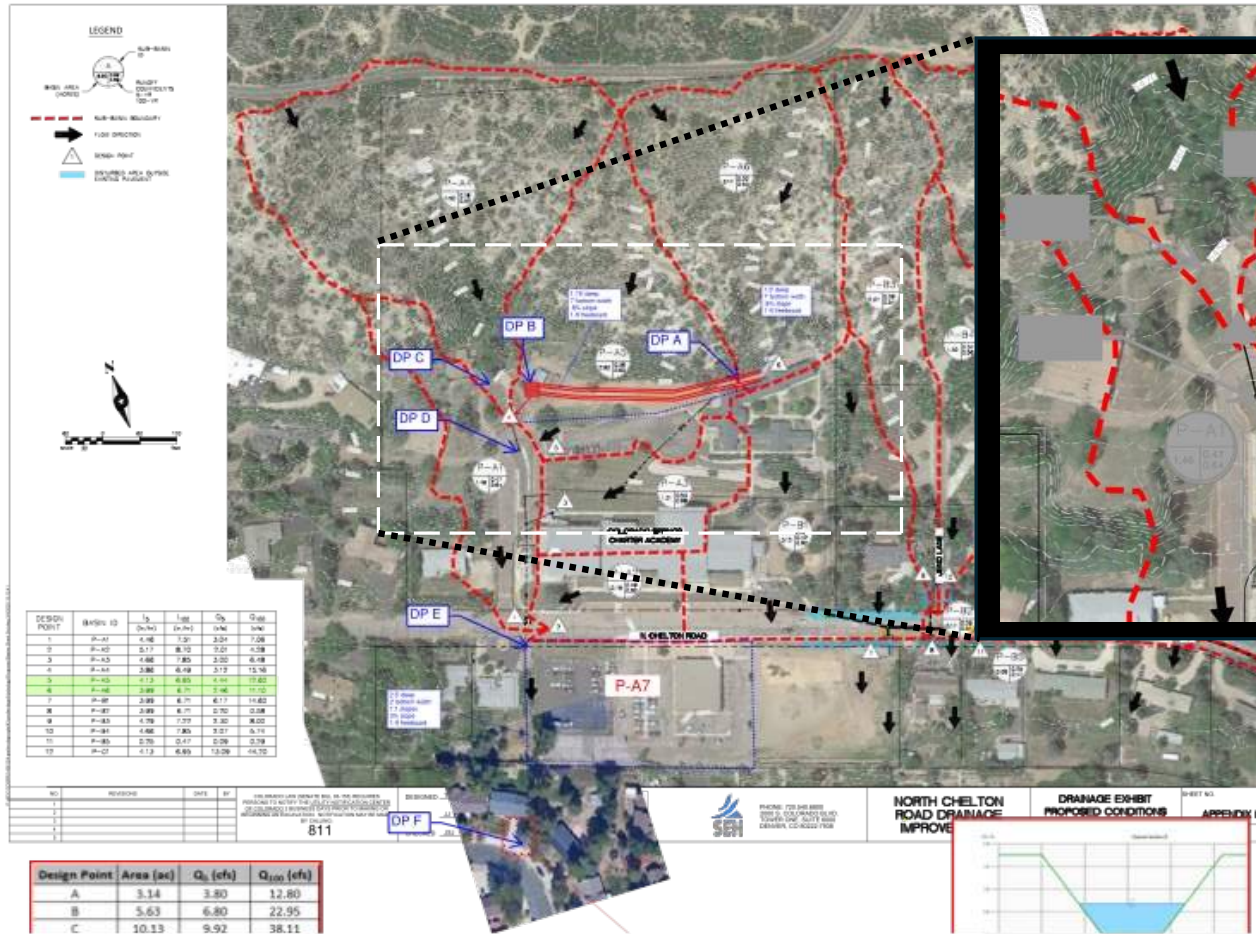
Storm Drainage Mitigation Plan Diagram of Solution Elements



- Install open concrete drainage channel (trapezoidal ditch) behind existing Middle School (green line) to convey storm water to CSCA Storm Drainage Infrastructure Inlet
- Existing CSCA Storm Drainage Infrastructure can accommodate the contributing +3.5 acres of MS storm flow
- Installation of drainage improvements require the demolition of the failing Middle School
- Replacement Middle School to locate adjacent to existing Gymnasium

Photo 11 Solution #3 – Improve Site Storm Drainage at Middle School

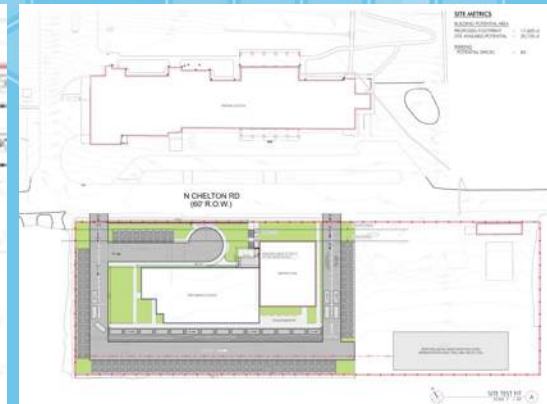
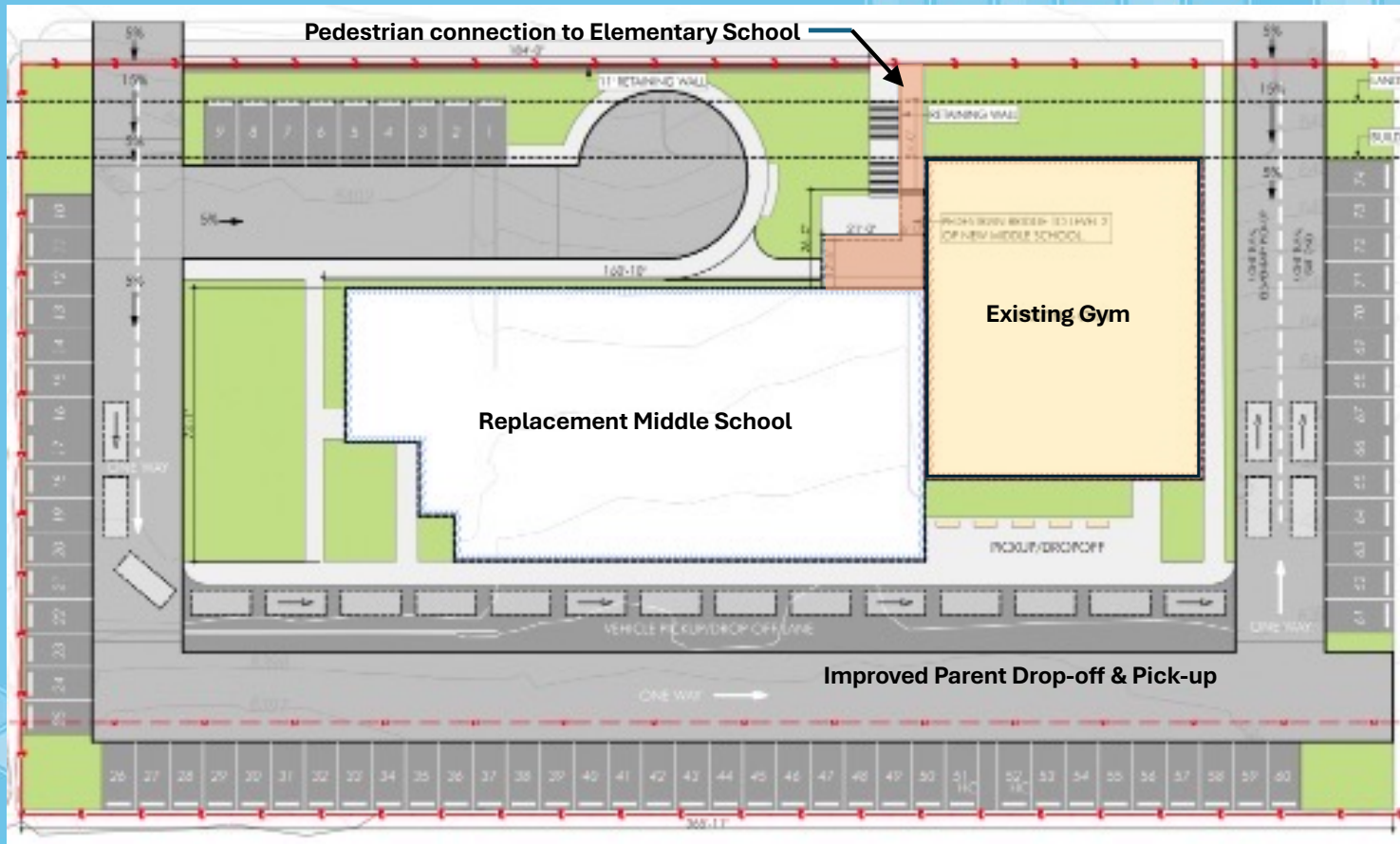
Engineered Solution Submitted to LDTC – City of Colorado Springs Planning and Development



Solution #3: (enlarged view) Install open concrete drainage channel behind Middle School to convey storm water to CSCA Storm Drainage Infrastructure Inlet;

Solution had Preliminary Approval by City of Colorado Springs LDTC

Photo 12 Solution #3 – Replacement Middle School Site Plan



Solution #3:

- Replacement Middle School is located adjacent to existing Gymnasium
- Parent Drop-off and Pick-up is streamlined for improved safety and security
- Existing Playground will serve MS students. A new Elementary School playground (not funded by BEST) will be constructed at demolished MS site to serve ES students.
- ES student will no longer cross Chelton Road multiple time a day for recreation.

Photo 13 Solution #3 – Replacement Middle School Floor Plans



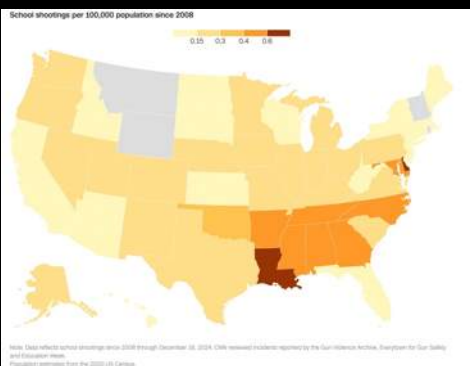
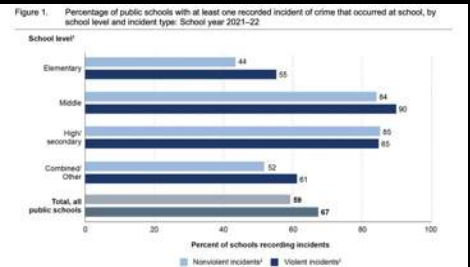
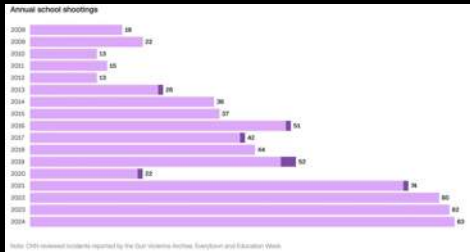
Replacement Middle School – **Level 1**



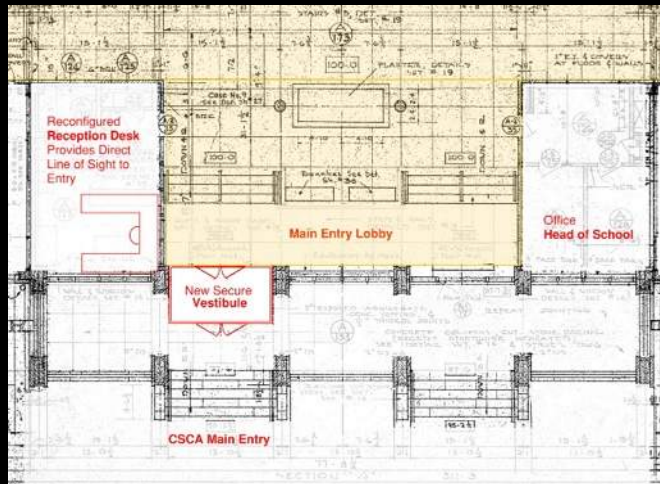
Replacement Middle School – **Level 2**

Photo 14 Deficiency 4 – Lack of Secure Entry Vestibule and Security Equipment

Solution #4 – Install Secure Entry Vestibule and Upgrade Security Equipment



New Secure Vestibule installs under concrete canopy at Main Entry



New Secure Vestibule

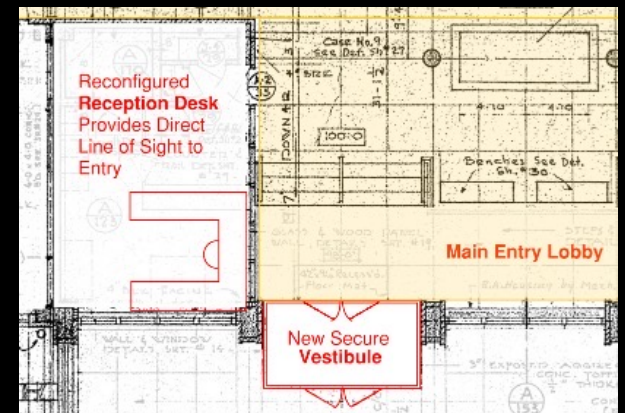
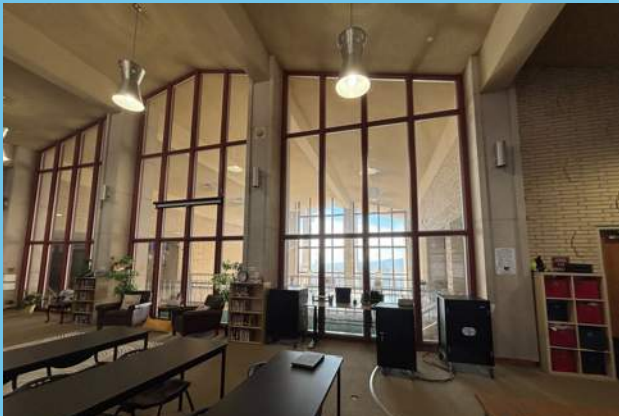
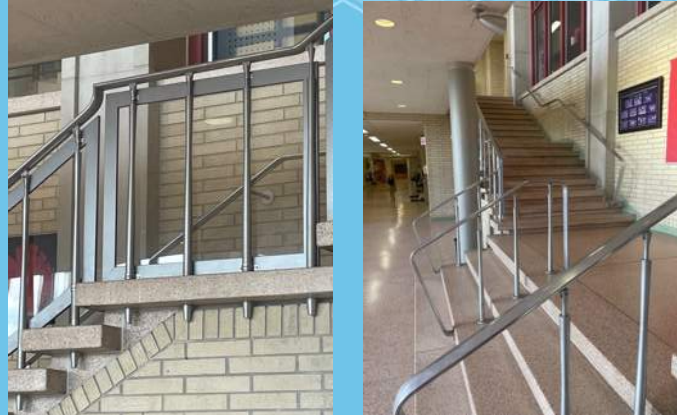


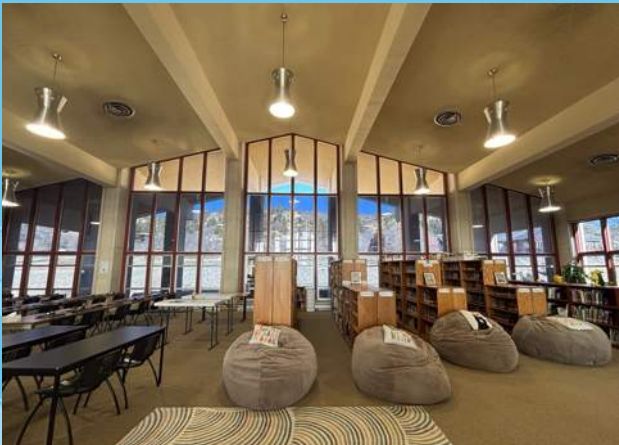
Photo 15 Historical Interest – Exceptional 1965 Mid-Century Modern Elementary School
Outstanding Design & Functionality, Durable Materials, Natural Light, for Next 200 Years



Library View to Second Level Hall & Lobby



Stainless-Steel Stair Rail, Terrazzo Floors, Interior Brick



Library View to Bluff Crest



Typical Classroom Hallway - Clerestory Windows



Entry Lobby view towards Reception